



SAN BERNARDINO MICROWAVE SOCIETY, Incorporated

FOUNDED IN 1966

A NON-PROFIT AMATEUR TECHNICAL ORGANIZATION DEDICATED
TO THE ADVANCEMENT OF COMMUNICATIONS ABOVE 1000 MC.

W6IFE Newsletter

President: **Doug Millar, K6JEY** 2791 Cedar Ave Long Beach, CA 90806 562-424-3737
doughhelen@moonlink.net

Vice President: **Dick Bremer, WB6DNX** 1664 Holly St. Brea, CA 92621 714-529-2800 rabremer@juno.com

Recording Sec: **Mel Swanberg, WA6JBD** 231 E Alessandro Blvd Riverside, CA 92508 909-369-6515
swanberg@pe.net

Corresponding Sec: **Kurt Geitner, K6RRA** 213 Main St. #5 Seal Beach, CA 90740 310-718-4910
k6rra@gte.net

Treasurer: **Dick Kolbly, K6HIJ** 26335 Community Barstow, CA 92311 760-253-2477
rkolbly@compuserve.com

Editor: **Bill Burns, WA6QYR** 247 Rebel Rd Ridgecrest, CA 93555 760-375-8566 bburns@ridgecrest.ca.us

Webmaster Chip Angle, N6CA

ARRL Interface Frank Kelly, WB6CWN 1111 Rancho Conejo Blvd. #501 Newbury Park, CA 91320
805-499-8047 fk@event1.com

FCC Interface Dave Laag, K6OW 11614 Indian St. Moreno Valley, CA 92557 909-924-1517

W6IFE License Trustee Ed Munn, W6OYJ 6255 Radcliffe Dr. San Diego, CA 92122 619-453-4563
edmunn@compuserve.com

The **1 June 2000** meeting of the SBMS will be to visit Mike Collis, WA6SVT operations in the town of Ontario. Mike has an educational TV station and has ATV equipment on 1.2 GHz and 2.4 GHz. Mikes operation is located west from the I-15 and I-10 interchange off the I-10 on Haven Ave off ramp south, left on Guasti (heading west) to Turner Ave. Then find 250 Turner Ave with the towers. It is next to a big church. Thomas Guide map 603. Plenty of parking is available. We will be meeting at 7:00 pm. Talk in will be on 146.52. This will be a great chance to go out and see a set up that we couldn't possibly bring to the hall and see. Mike runs a satellite and microwave link educational network for an educational institution. There will be lots to see and learn. We will have a short regular business meeting to start with as well as our "sharing circle" of what each station is up to. After that, it is Mike's show. I hope that we can do something like this three times a year or so. Doug will have his cell phone on in case you get lost. (562/505-2102). We will have the "dinner meeting" at the Hometown restaurant across the street.

The SBMS meets at the American Legion Hall 1024 Main Street (south of the 91 freeway) in Corona, CA at 1900 hours local time on the first Thursday of each month. Check out the SBMS web site at <http://www.ham-radio.com/sbms/>.

Check your mail label for dues due date that follows your call sign. Dues go to the treasurer.

Last meeting had a talk by Dave, WA6CGR on his 1999 10 GHz and UP contest winning roving of the California central valley. This is running up highway 99 on the east side of the central valley from the Bakersfield area to Merced, across west on highway 152 to Los Banos and then south on Interstate 5 to the Bakersfield area and further south if you dare. This requires much planning and having other hams on hilltops in the south end mountains (Robin, WA6CDR on Mt. Wilson, someone on Heaps Pk, people on Frazier Mtn.) or further south in the LA area or even down Baja. Having guys on hilltops in the north end is a plus. The Mt Tamopias, Diablo, San Benito, etc. A big thanks to the northern California folks. Included in this newsletter is Dave's planning list for the gear in the car. Dave also provided lots of pictures to share at the meeting, some of which will be in the newsletter. Great Talk Dave.

Bill, WA6QYR talked about his similar winning effort in 1998 with navigator/ helper Mel, WA6JBD. Bill had maps of places to stop where the fruit trees, grape vines, or corn are minimal. The trash heaps (mountains, in a flat land any bump over 100 ft tall is a mountain) in Fresno and Merced. Bill had a few photographs to show he and Mel out working the contest.

Chuck, WA6EXV had a talk on the area that he and Bill, WA6QYR had set up in 1986-88 to maximize the 6 digit grids in the Upper Mojave Desert north of the San Gabriel/ San Bernardino Mountains that could be worked from Heaps Peak (DM14kf above Lake Arrowhead). This was a time when the first 10 GHz gunnplexers were out with the 10mw transmit and small dishes were the way to go. Most of these locations are now good rover spots for higher power SSB rigs talking to other hilltops most anywhere around the upper Mojave. Chuck and Bill have lists of these locations for those interested in roving. Future newsletters will have these lists. Good talk. Thanks Chuck.

SBMS had visitors- Richard Harwick, AB4AW of Riverside; John Davidson, KC6TFS of Riverside; and George Ashby W6RPD of Riverside. Welcome! President Doug had asked that Down East Microwave send SBMS a note when someone in the western US buys gear so that SBMS can contact them to see if they need help or contacts. There was a list passed around for helpers to clean up the Heaps Peak site, since we like to use the site during the non-snow times. The awards committee (Chuck, WA6EXV) presented Dave, WA6CGR with his plaque for winning the 1999 10 GHz and Up contest in the 10 GHz and up section. A plaque is on its way to John Anderson, WD4MUO/ 0 for winning the 10 GHz only section of the contest. 23 people at the meeting.

From the Prez- "Time to Shoot the Engineer!" John, KJ6HZ and I were talking about getting his 10 GHz narrow band rig ready for the contest and he observed, "I guess it's time to shoot the engineer and build the darn thing". He's right. If you are still working on your rig for the 10 GHz contest, it is definitely time to shoot the engineer and build.

One of the things you might want to do to get ready in time is to simplify. In John's case it seemed that if he used two horn antennas and ran separate cables out for TX and Rx to the transverter, he would eliminate a great deal of building and time. He could go for the fancy antenna later. The horns would give him plenty of range in the meantime. Remember, we only get on the air twice a year! If you aren't ready, you won't have another good chance till next year. [some of us are on year round. ed]

So, my advice is:

1. Get on the air with whatever you can.
2. Don't solve all the problems before you start building. Build. Then if you run into problems call for help! There are a number of individuals who will gladly help you finish up or do testing. I will for one, and I am sure others who have offered in the past such as W6SYA, WB6DTA and WA6PAZ are also willing.
3. If you only end up with 3 mw and a 6-db noise figure, you are still going to make it. Remember the other stations need your points too! By working with a group at either Signal Hill or Heaps, you can make a number of short-range contacts if nothing else.

4. If it all blows or burns up the week before- come up to Heaps or join a rover anyway and log, or just observe. Don't sit at home. The bottom line is to have fun and enjoy the activity.

Thanks for the great Program Guys!

Thanks to Dave (WA6CGR), Chuck (WA6EXV), and Bill (WA6QYR), for an excellent program on how to rove during the contest. Dave's check off list is probably still available and very valuable. (Is it on your web site, Dave?) Chuck and Bill were a goldmine of information on where exactly to stop when roving. Be careful, though, it will get in your blood.

Scheduling-

10-12 June VHF QSO Party

6 July- Preliminary planning is for a talk on how to operate from a mountaintop such as Heaps Pk.

29 July - A joint SBMS, San Diego Microwave Group rig field measurement party.

3 August- Preliminary plan is for finalizing of 10 GHz contest positioning.

5-6 August UHF contest

19-20 August 10 GHz and Up contest first half

9-10 September VHF contest

16-17 September 10 GHz and Up contest second half

Wants and Gots for Sale

Want WR-42 90-degree twist and WR-42 waveguide switch Dave, WA6CGR 909-318-5154.

Want to purchase a spectrum analyzer, Dick Kolbly, K6HIJ 760-253-2477.

Want service manual for Eaton 757 Spectrum Analyzer or info, R Harwick AB4AW 909-684-1748
AB4AW@PE.net

For Sale 1977 International Scout II 4x4 345 v8 4 speed one owner Bill WA6QYR 760-375-8566.

Activity reported at the May 2000 SBMS meeting: Mel, WA6JBD dismantled some commercial radio site and has a Uniden 2500 modified for an IF radio; Dave, WA6CGR played with pipe cap filters; John, KJ6HZ put a rig in his car; Gene, WA6YOJ upgraded his license; Gary, W6KVC worked on some ATV gear and wants some help on a clean up crew for Heaps Peak; Larry, K6HLH has 1.2 GHz and 5.6 GHz rigs on the air on his rotatable tower; Ken, WB6DTA built some 5 GHz filters and amplifiers, he had his 2.3 GHz rig to show the reception of the SBMS beacon on Heaps Peak; Bob, W6SYA had his big 2.3 GHz rig to show the reception of the beacon; John, KC6TFS is back into radio; Alicia, KF6WMX is studying like any college person; Chuck, WA6EXV is building a narrowband 24 GHz rig using the qualcomm synthesizer with a 10 GHz IF (24.048 Phase 3D, 24.192 terrestrial) and is planning another trip to Cory Pk, NV in May; Bill, WA6QYR is working with the 2 mtr to 10 mtr converter from last meeting for his Noise Figure gear; Dick, WB6DNX is testing oscillators for another 10 GHz rig; Doug, K6JEY was 24th in the 432 EME contest

Ed, W6OYJ San Diego report via email--WB6BKR, John, has deleted the noise bugs from his 24 GHz wbfm rig and completed a short QSO with W6OYJ over a 2 mile path from Mt Soledad. Ed, W6OYJ and Kerry, N6IZW are experimenting with use of the narrowband digital mode called PSK31 via Mt San Miguel, with the repeater turned on and off. The PSK31 mode uses BPSK or QPSK and occupies only about 31 Hz of ssb bandwidth, so it may have possibilities for weak signal microwave work. Articles about PSK31 appeared in QST for May 1999

and May 2000 issues. The software uses the existing sound card in your computer to provide the modulation and decoding when used with an SSB TX/RX setup. The software is freeware and can be found on the web by using a search engine to look for "PSK31", and more recently "DigiPan". I think the DigiPan software is easier to use, especially to tune in signals in this mode. It is downloadable from: <http://members.home.com/hteller/digipan/> this software requires a 486-100 PC or faster running Windows 95 or 98. There are other versions of PSK31 software also available. There is a fair amount of activity using PSK31 on the HF bands, particularly around 14.070 MHz, 21.080, 28.120, and 7.035. Jeff, KF6PBP is now on the air with one of the newest Qualcomm mods for 10 GHz and is planning to also build a 24 GHz narrowband setup, with most of the pieces already in hand. 73s from Ed, W6OYJ

Places to rove in the South Bay {Los Angles area} By Doug K6JEY

Over a couple of years of roving in the area, I have found a couple of good spots to use. If you think of Signal Hill as home base, here is how it works.

First of all there are good spots and bad spots on the Hill. To cover all the areas you have to use three spots. First is a good spot for San Diego and San Pedro on the South side of the hill. If you come up from the West side near the Home Depot, you will pass the left turn for the park and crest the hill. On the right side just before a side street goes off to the southeast, you can park and set up on the dirt. Great spot for the south. If you go back to the park turn off and go north to where the road dead ends, you will find a great spot for west and north. If you go to the east side of the hill, go past the barriers and set up. It is a great shot to Heap's and only fair to San Diego. Sounds like a lot of hassle, but by using these places you won't get blanked out by all the RF on the Hill. Also, when you first get there, check out all of the spots to see if any one is already up there.

San Pedro- There is probably lot of places to go, but the easiest is at the turn out and view point just before the Korean Bell. I think it is on Gaffey. There is the remains of a gun mount at the spot that is great for mounting tripods. It offers a great view from northeast to southwest. North and west are not good. It is 10.1 miles from Signal Hill and is a legal contact from there. If you are QRP or want a short range QSO this is a great spot. Heaps and S.D. are easy to work from here as well. Another spot is to go up to the top of PV by the radar station. You may be able to work in more directions from there. Check with Kurt (K6RRA) for conditions, as he sometimes operates from there.

Redondo Beach- There aren't very many good spots from the South Bay that point the right way, are clear and are 10 miles from the last two places. However the best one is at the South Bay Hospital's parking garage, top level. The hospital is on Prospect at about 190th Ave. The parking garage is for visitors but I have never had any trouble being there. Again, it is far enough away from the last two spots to count as a new location and to be able to work everyone again. If the conditions are good to SD and Heaps, and there are lots of stations on, you should be able to do quite well from these three spots and not have to drive too far.

Lastly, check in on the liaison frequencies so we know where you are and where you are planning to go. You might also come to the meetings in July and Aug. to find out where others are planning to be. Have fun, carry and extra battery, and make lots of QSO's!

Microwave Update 2000 will be hosted by the Mt. Airy VHF Radio Club (Pack Rats) at the Holiday Inn Select, Bucks County, 4700 Street Road, Trevoze, PA 19053 on 28-30 September 2000. 215-364-2000, 800-HOLIDAY. For more info contact John Sortor, KB3XG at johnkb3xg@aol.com or <http://www.ij.net/packrats/mud.html>.

73's Bill

San Bernardino Microwave Society is a technical amateur radio club affiliated with the ARRL having a membership of over 90 amateurs from Hawaii and Alaska to the east coast. Dues are \$15 per year, which includes a badge and monthly newsletter. Your mail label indicates your call followed by when your dues are due. Dues can be sent to the treasurer Your mail label indicates your call followed by when it is time to renew your dues. Dues can be sent to the treasurer as listed under the banner on the front page. If you have material you would like in the newsletter please send it to Bill WA6QYR at 247 Rebel Road Ridgecrest, CA 93555,

bburns@ridgecrest.ca.us, or phone 760-375-8566. The newsletter is generated about the 15th of the month and put into the mail at least the week prior to the meeting. This is your newsletter. SBMS Newsletter material can be copied as long as SBMS is identified as source.

San Bernardino Microwave Society newsletter

247 Rebel Road

Ridgecrest, CA 93555

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